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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,633	07/21/2003	Patrick Carl Wiley	I0780095 TWB/cd	4559

7590 06/28/2005

Oyen Wiggs Green & Mutala
The Station-Suite 480
601 West Cordova Street
Vancouver, BC V6B 1G1
CANADA

EXAMINER

GOFF II, JOHN L

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/622,633

Applicant(s)

WILEY, PATRICK CARL

Examiner

John L. Goff

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 15-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 12-14 is/are rejected.
- 7) ☒ Claim(s) 6-11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/26/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-14 and 20, in the reply filed on 6/13/05 is acknowledged.

Double Patenting

2. Applicant is advised that should claim 1 be found allowable, claim 20 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 12-14, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu (JP 05098613 and abstract) in view of Wiley et al. (U.S. Patent 5,653,552).

Shimizu discloses a method of bonding a thermoplastic road marking to a road surface.

Shimizu teaches the method comprises positioning the road marking on the road surface,

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applying infrared heat to melt the road marking in situ, pressing the road marking onto the road surface, and allowing the road marking to cool and set thereby bonding the road marking onto the road surface (See abstract). Shimizu does not describe the particulars of the infrared heating technique. It would have been obvious to one of ordinary skill in the art at the time the invention was made to perform the infrared heating taught by Shimizu using a well known apparatus and method wherein an apparatus including a plurality of infrared heating banks is operated in situ to heat a road surface by periodically passing over the road surface in a reciprocating manner as shown for example by Wiley et al. to uniformly and efficiently heat the road surface and road marking without burning and/or smoking of the road surface and/or road marking.

Regarding claim 4, Shimizu does not specifically describe an asphalt road surface. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to perform the method taught by Shimizu on conventional road surfaces which would have included asphalt, Wiley et al. are exemplary of describing a conventional road surface formed of asphalt.

Regarding claim 14, it is noted the method taught by Shimizu as modified by Wiley et al. would intrinsically result in partial cooling after each successive pass of the heater due to the lack of heating after the heater has passed.

Wiley et al. disclose a method and apparatus for heating an asphalt road surface comprising an apparatus including a plurality of infrared heating banks operated in situ to heat a road surface by periodically passing over the road surface in a reciprocating manner to uniformly and efficiently heat the road surface without burning and/or smoking of the road surface (Column 6, lines 15-33 and Column 7, lines 49-67 and Column 8, lines 15-17).

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5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu and Wiley et al. as applied to claims 1-4, 12-14, and 20 above, and further in view of either one of 3M (See "3M Guidelines for Pavement Marking Application in Grooved Pavement Surface") or Cataphote (See "Cata-Groove Snow Plow Resistant Thermoplastic Marking).

Shimizu and Wiley et al. as applied above teach all of the limitations in claim 5 except for a specific teaching of in-laying the road marking within the road surface. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to perform the method taught by Shimizu as modified by Wiley et al. wherein the road marking is in-layed within the road surface as this was a well known technique to protect the road marking, from for example snowplow damage, and increase the service life of the road marking as shown for example by either one of 3M or Cataphote.

3M and Cataphote are exemplary of the well known technique of in-laying a road marking with a road surface to protect the road marking, from for example snowplow damage, and increase the service life of the road marking (First Paragraph of 3M and First Paragraph of Cataphote).

Allowable Subject Matter

6. Claims 6-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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7. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fails to teach or suggest a method of bonding a marking to a substrate comprising positioning the marking on the substrate, positioning a heating apparatus over the marking wherein the apparatus includes **a support frame extending over the marking and a heater is mounted for movement on the support frame**, heating the marking and substrate in situ by moving the heater along the support frame over the marking, and repeating, i.e. at least more than once, the heating step a sufficient number of passes to bond the marking to the substrate when the marking has reached a pliable, i.e. melted, state. FR 259143 discloses a method of bonding a marking to a substrate in situ including the claimed steps except for the support frame of the heating apparatus extends around or under the marking not over the marking (Figure 1).

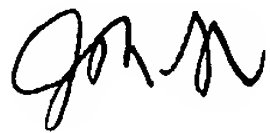
Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is **(571) 272-1216**. The examiner can normally be reached on M-F (7:15 AM - 3:45 PM).

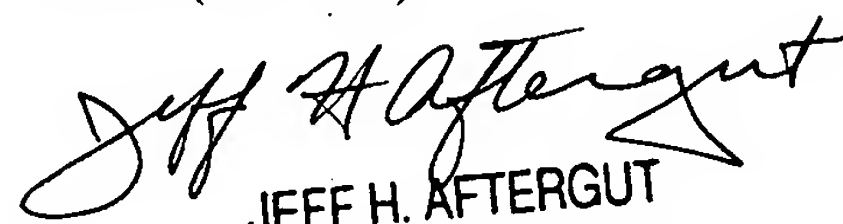
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John L. Goff



JEFF H. AFTERGUT
PRIMARY EXAMINER
GROUP 1300